

What is claimed is:

1. A washable electric motor assembly for use in food or medicine preparation applications subject to FDA oversight, comprising:
 - an electric motor having a component with a non-corroding exposed surface;
 - an unsealed housing comprising a non-corroding housing material, said unsealed housing configured to admit washing fluid during a washing operation and to allow the exit of the washing fluid upon completion of the washing operation;
 - whereby said washable electric motor assembly is resistant to the effects of corrosive substances, and said electric motor is protected against failure from corrosion by the exiting of the washing fluid from the unsealed housing.
2. The washable electric motor assembly according to Claim 1, wherein the unsealed housing is further configured to permit the washing fluid to be driven off by thermal energy generated by operation of the electric motor.
3. The washable electric motor assembly according to Claim 1, wherein a selected one of an electric motor having a component with a non-corroding exposed surface and a non-corroding housing material comprises titanium.
4. The washable electric motor assembly according to Claim 1, wherein the non-corroding housing material comprises a base metal covered with a selected one of electroless nickel plating and cobalt coating.

5. The washable electric motor assembly according to Claim 1, wherein the electric motor is a permanent magnet brushless motor.
6. The washable electric motor assembly according to Claim 1, wherein a component of the motor comprises a coating of a vapor deposited material that can form a pinhole free protective film.
7. The washable electric motor assembly according to Claim 6, wherein the vapor deposited material is parylene.
8. The washable electric motor assembly according to Claim 1, further comprising an encoder.
9. The washable electric motor assembly according to Claim 1, further comprising a resolver.
10. A method of washing an unsealed electric motor assembly, wherein the motor assembly includes an unsealed non-corroding housing material and a motor having non-corroding components, the motor assembly configured to be used in food or medicine preparation activities subject to FDA oversight, comprising the steps of: washing the unsealed electric motor assembly with a washing fluid, whereby the washing fluid is permitted to enter the interior of the unsealed electric motor assembly;

removing the washing fluid from the unsealed electric motor assembly; and
operating the electric motor, whereby residual washing fluid remaining within the
unsealed electric motor assembly is driven off as a result of the heating of the
motor during said operation;
whereby said electric motor and said electric motor assembly are cleaned, and
said electric motor is protected against failure from corrosion by the driving
off of the residual fluid from the unsealed electric motor assembly.

11. The method of washing an unsealed washable electric motor assembly according to
Claim 10, wherein the step of removing the washing fluid from the unsealed
washable electric motor assembly includes permitting the washing fluid to drain from
the unsealed washable electric motor assembly.

12. The method of washing an unsealed electric motor assembly according to Claim 10,
further comprising the step of:
removing the unsealed electric motor assembly from an apparatus to which it is
mounted prior to performing the washing step.